The Word Order Cycle

The development from head-final to head-initial syntax in branches of Indo-European, Uralic, Sino-Tibetan, Niger-Congo, and Afro-Asiatic is a notable instance of the problematic phenomenon of convergent long-term "drift". Less often discussed is the contrary development of head-initial to head-final syntax, documented in Austro-Asiatic and Austronesian, and inferrable by internal reconstruction also elsewhere. I argue that these two opposite "drifts" are phases of a larger word-order cycle, and propose a causal mechanism for it, formally grounded in a system of violable linearization constraints that derives a word order typology:

- (1) 1. XP<HEAD: Heads follow their complements (= generalized subject-predicate order).
 - 2. OP<XP: Functional heads (operators) precede their complements.
 - 3. C<XP: Complementizers (subordinating operators) precede their complements.
- (2) HARMONY: If A dominates B, then A and B have the same headedness. (cf. Hawkins 1994)

If these constraints are defined on overt surface syntactic structure above the word level (as required by typological evidence such as the FOFC), they predict an important correlation between word structure and syntactic headedness: languages that have no overt syntactic functional heads, but express functional information by inflecting words, are head-final. The grammaticalization of lexical elements into functional heads, and the further reduction of these to clitics and affixes, then have consequences for syntactic headedness by constraints (1) and (2), which can be leveraged into an explanation for the word order cycle. Formally, "drift" can be seen as the result of learners' bias at each stage of acquisition for the most probable language that is consistent with what they have already learned, where the probability of a language L is measured by its *ranking volume*, the proportion of fully ranked constraint systems that generate L.